AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

Claim 1 (currently amended)

1. A compound of general formula (Ic), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
 R_6

wherein

R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄-alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur, and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, -C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl;

R₂ is hydrogen, C₁-C₆-alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄-alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, OR₁₁, halogen, cyano, nitro, NR₉R₁₀ or SR₁₁;

R₃, R₄ and R₅ are each independently selected from: hydrogen, C₁-C₄.alkyl, halogen, OR₁₁, C₁-C₄.alkylcarbonyloxy, NR₉R₁₀, SO₂NR₉R₁₀, carboxyl, cyano and nitro;

Z is O or S;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (v);

wherein X_1 and X_2 are each independently selected from: a carbon atom and a heteroatom selected from: oxygen, sulfur, and nitrogen atom, provided that at least one of X_1 and X_2 is a nitrogen atom heteroatom, and when wherein the X_1 or X_2 is a nitrogen atom, it is at least monosubstituted by R_{13} , wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, cyano, SO_2R_{10} , $-CO(CH_2)_mR_{14}$ and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 -alkoxycarbonyl and $-C_1$ - C_4 -alkylenehydroxyl; and

R₆ is -C₁-C₄-alkyleneOR₁₁;

 R_9 and R_{10} are each independently selected from: hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkanoyl, C_1 - C_4 -alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl;

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R₁₄ is hydrogen, C₁-C₄-alkyl, hydroxyl, - NR₉R₁₀, halogen, -SH, or -S-C₁-C₄-alkyl; and

m is an integer of 0 to 6.

Claim 2 (currently amended)

2. A compound of the general formula (Id), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
 R_6
 R_6

wherein

R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur, and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl;

R₂ is hydrogen, C₁-C₆-alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄-alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, OR₁₁, halogen, cyano, nitro, NR₉R₁₀ or SR₁₁;

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 R_3 , R_4 and R_5 are each independently selected from: hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxyl, halogen, OR_{11} , C_1 - C_4 -alkylcarbonyloxy, NR_9R_{10} , $SO_2NR_9R_{10}$, carboxy, cyano and nitro;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (iv);

wherein X_1 is either a carbon atom or a heteroatom selected from: oxygen, sulfur, and nitrogen atom, except that in structures (ii) and (iv) X_1 is either a carbon atom or a nitrogen atom, and wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, cyano, SO_2R_{10} and $-CO(CH_2)_mR_{14}$, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 -alkoxycarbonyl and $-C_1$ - C_4 -alkylenehydroxyl;

R₆ is -C₁-C₄-alkyleneOR₁₁:

R₉ and R₁₀ are each independently selected from: hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, C₁-C₄-alkoxycarbonyl, C₁-C₄-alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl;

R₁₄ is hydrogen, C₁-C₄-alkyl, hydroxyl, -NR₉R₁₀, halogen, -SH, or -S-C₁-C₄-alkyl; and

m is an integer of 0 to 6.

Claim 3 (currently amended)

3. A compound of the general formula (Ie), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
(le)

wherein

R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄-alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl;

 R_2 and R_4 are hydrogen;

 R_3 and R_5 are each independently selected from: hydroxyl, $C_1\text{-}C_4\text{-}alkoxyl$ and $C_1\text{-}C_4\text{-}alkylcarbonyloxy}$;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (iv);

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wherein X_1 is either a carbon atom or a heteroatom selected from: oxygen, sulfur, and a nitrogen atom, except that in structures (ii) and (iv) X_1 is either a carbon atom or a nitrogen atom, and wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl, or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, cyano, SO_2R_{10} , $-CO(CH_2)_mR_{14}$ and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 -alkoxycarbonyl and - C_1 - C_4 -alkylenehydroxyl;

R_6 is $-C_1$ - C_4 -alkylene OR_{11} ;

R₉ and R₁₀ are each independently selected from: hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, C₁-C₄-alkoxycarbonyl, C₁-C₄-alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl;

 R_{14} is hydrogen, C_1 - C_4 -alkyl, hydroxyl, - NR_9R_{10} , halogen, -SH, or -S- C_1 - C_4 -alkyl; and m is an integer of 0 to 6.

Claim 4 (previously presented)

4. A compound of the general formula (If), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_3
 R_2
 R_5
 R_6
 R_1
 R_{13}
(If)

wherein

 R_1 is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 alkoxycarbonyl and - C_1 - C_4 -alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 alkoxycarbonyl and - C_1 - C_4 -alkylenehydroxyl;

R_2 and R_4 are hydrogen;

 R_3 and R_5 are each independently selected from: hydroxyl, C_1 - C_4 -alkoxyl and C_1 - C_4 -alkylcarbonyloxy;

R₆ is -C₁-C₄-alkyleneOR₁₁;

 R_9 and R_{10} are each independently selected from: hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkanoyl, C_1 - C_4 -alkoxycarbonyl, C_1 - C_4 -alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl; and

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 R_{13} is hydrogen or C_1 - C_4 -alkyl.

Claim 5 (previously presented)

5. A compound of the general formula (Ig), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
 R_6
 R_6

wherein

R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl;

 R_2 is hydrogen, C_1 - C_6 -alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 alkoxycarbonyl and - C_1 - C_4 -alkylenehydroxyl, OR_{11} , halogen, cyano, nitro, NR_9R_{10} or SR_{11} ;

 R_3 , R_4 and R_5 are each independently selected from: hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxyl, halogen, OR_{11} , C_1 - C_4 -alkylcarbonyloxy, NR_9R_{10} , $SO_2NR_9R_{10}$, carboxyl, cyano and nitro;

Z is O or S;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (v);

wherein X_1 and X_2 independently represent a carbon atom and a nitrogen atom provided that at least one of X_1 and X_2 is a nitrogen atom and wherein the nitrogen atom is at least monosubstituted by R_{13} , wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl, or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, SO_2R_{10} , $-CO(CH_2)_mR_{14}$, cyano, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 -alkoxycarbonyl and $-C_1$ - C_4 -alkylenehydroxyl;

 R_6 is C_1 - C_4 -alkyl, $-C_1$ - C_4 -alkanoyl, hydroxyl, C_1 - C_4 -alkoxyl, $-C_1$ - C_4 -alkoxycarbonyl, $-C_1$ - C_4 -alkyleneOR₁₁, $-C_1$ - C_4 -alkyleneHalo, $-C_1$ - C_4 -alkyleneNR₉R₁₀, $-C_1$ - $-C_4$ -alkyleneC(O)OR₉, phenoxy, $-NR_9R_{10}$, SR_{12} , $S(O)_nR_{12}$, $-C(O)R_{12}$ or $-C(S)R_{12}$;

R₉ and R₁₀ are each independently selected from: hydrogen, C₁-C₄.alkyl, C₁-C₄.alkanoyl, C₁-C₄.alkoxycarbonyl, C₁-C₄.alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl;

R₁₂ is hydrogen, halogen, C₁-C₄-alkyl, -NR₉R₁₀ or OR₉;

R₁₄ is hydrogen C₁-C₄-alkyl, hydroxyl, -NR₉R₁₀ halogen, -SH, or -S-C₁-C₄-alkyl;

m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 6 (cancelled).

Claim 7 (previously presented)

7. A compound of general formula (Ih), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
 R_6
 R_6

wherein

R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and

sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 alkoxycarbonyl and - C_1 - C_4 -alkylenehydroxyl;

R₂ and R₄ are hydrogen;

R₃ and R₅ are each independently selected from: hydroxyl, C₁-C₄-alkoxyl and C₁-C₄-alkylcarbonyloxy;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (v);

wherein X_1 and X_2 independently represent a carbon atom and a nitrogen atom, provided that at least one of X_1 and X_2 is a nitrogen atom and wherein the nitrogen atom is at least monosubstituted by R_{13} , wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl, or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, cyano, SO_2R_{10} , $-CO(CH_2)_mR_{14}$ and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 alkoxycarbonyl and $-C_1$ - C_4 -alkylenehydroxyl;

 $R_6 \ is \ C_1\text{-}C_4\text{-}alkyl, \ -C_1\text{-}C_4\text{-}alkanoyl, \ hydroxyl, \ C_1\text{-}C_4\text{-}alkoxyl, \ -C_1\text{-}C_4\text{-}alkoxycarbonyl, \ -C_1\text{-}C_4\text{-}alkyleneOR_{11}, \ -C_1\text{-}C_4\text{-}alkyleneNR_9R_{10}, \ -C_1\text{-}C_4\text{-}alkyleneC(O)OR_{9}, \ phenoxy, \ -NR_9R_{10}, SR_{12}, S(O)_nR_{12}, -C(O)R_{12} \ or -C(S) \ R_{12};$

 R_9 and R_{10} are each independently selected from: hydrogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkanoyl, C_1 - C_4 -alkoxycarbonyl, C_1 - C_4 -alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl or C₁-C₄-alkoxycarbonyl;

R₁₂ is hydrogen, halogen, C₁-C₄-alkyl, - NR₉R₁₀ or OR₉:

R₁₄ is hydrogen, C₁-C₄-alkyl, hydroxyl, - NR₉R₁₀, halogen, -SH, or -S-C₁-C₄-alkyl;

m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 8 (previously presented)

8. A compound of general formula (Ii), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof

$$R_4$$
 R_5
 R_5
 R_6
(Iii)

wherein

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R₁ is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C₁-C₄-alkyl, C₁-C₄-alkoxy, nitro, NR₉R₁₀, SR₁₁, trifluoromethyl, hydroxyl, cyano, carboxy, C₁-C₄alkoxycarbonyl and -C₁-C₄-alkylenehydroxyl;

R₂ and R₄ are hydrogen;

R₃ and R₅ are each independently selected from: hydroxyl, C₁-C₄-alkoxyl and C₁-C₄-alkylcarbonyloxy;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (iv);

wherein X_1 is a carbon atom or a nitrogen atom and wherein R_{13} is selected from: hydrogen, unsubstituted C_1 - C_6 -alkyl, or C_1 - C_6 -alkyl substituted by halogen, hydroxyl, or carboxyl, C_2 - C_6 -alkenyl, hydroxyl, C_1 - C_6 -alkoxy, C_1 - C_4 -alkylcarbonyl, toluenesulfonyl, cyano, SO_2R_{10} , – $CO(CH_2)_mR_{14}$ and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, nitro, NR_9R_{10} , SR_{11} , trifluoromethyl, hydroxyl, cyano, carboxy, C_1 - C_4 -alkoxycarbonyl and $-C_1$ - C_4 -alkylenehydroxyl;

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 R_6 is C_1 - C_4 -alkyl, $-C_1$ - C_4 -alkanoyl, hydroxyl, C_1 - C_4 -alkoxyl, $-C_1$ - C_4 -alkoxycarbonyl, $-C_1$ - C_4 -alkyleneOR₁₁, $-C_1$ - C_4 -alkyleneNR₉R₁₀, $-C_1$ - C_4 -alkyleneC(O)OR₉, phenoxy $-NR_9R_{10}$, SR_{12} , $S(O)_nR_{12}$, $-C(O)R_{12}$ or $-C(S)R_{12}$;

R₉ and R₁₀ are each independently selected from: hydrogen, C₁-C₄.alkyl, C₁-C₄.alkanoyl, C₁-C₄. alkoxycarbonyl, C₁-C₄.alkylcarbonyl, carboxamide and sulfonamide;

R₁₁ is hydrogen, C₁-C₄-alkyl, C₁-C₄-alkanoyl, or C₁-C₄-alkoxycarbonyl;

R₁₂ is hydrogen, halogen, C₁-C₄-alkyl, -NR₉R₁₀ or OR₉;

R₁₄ is hydrogen, C₁-C₄-alkyl, hydroxyl, -NR₉R₁₀, halogen, -SH, or -S-C₁-C₄-alkyl;

m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 9 (original)

9. A compound as claimed in claim 1, wherein R_1 is phenyl or pyridinyl, substituted by 1, 2 or 3 identical or different substituents selected from: halogen and nitro, R_2 and R_4 are hydrogen, R_3 and R_5 are hydroxyl, A is a saturated 5-membered ring represented by any one of the general structures (i) to (v), wherein X_1 , X_2 , R_6 and R_{13} are as defined.

Claim 10 (original)

10. A compound as claimed in claim 1, wherein R_1 is phenyl or pyridinyl, substituted by 1, 2 or 3 identical or different substituents selected from: halogen and nitro, R_2 and R_4 are hydrogen, R_3 and R_5 are hydroxyl, A is a saturated 5-membered ring represented by any one of the general structures (i) to (v), wherein X_1 is carbon, X_2 is nitrogen, R_6 is $-C_1$ - C_4 -alkylenehydroxyl, and R_{13} is C_1 - C_4 -alkyl.

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Claim 11 (previously presented)

- 11. A compound of the general formula (Ig) as claimed in claim 5, which is:
- (+/-)-trans-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-trans-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (-)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-trans-2-(2-Bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(4-Bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(4-Bromo-phenyl)-5-hydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-7-methoxy-chromen-4-one;
- (+)-trans-2-(4-Bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(3-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(3-Chloro-phenyl)-5-hydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-7-methoxy-chromen-4-one;
- (+)-trans-2-(3-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-iodo-phenyl)-5,7-dimethoxy-chromen-4-one;

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- (+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-iodo-phenyl)-chromen-4-one;
- (+)-*trans*-2-(2-Fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxychromen-4-one;
- (+)-*trans*-2-(2-Fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-*trans*-2-(3-Fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(3-Fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxychromen-4-one;
- (+)-trans-2-(2,6-Difluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-trans-2-(2,6-Difluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;
- (+/-)-*trans*-4-[5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;
- (+)-*trans*-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;
- (+)-trans-4-[5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;
- (+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;
- (+/-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;
- (+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;
- (+)-trans-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

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- (-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;
- (-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;
- (+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-phenyl-chromen-4-one;
- (+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-phenyl-chromen-4-one:
- (+)-trans-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-thiophen-2-yl-chromen-4-one;
- (+)-trans-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-thiophen-2-yl-chromen-4-one;
- (+)-trans-4-[5,7-Dihydroxy-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-3-methyl-benzonitrile;
- (+)-trans-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-3-methyl-benzonitrile;
- (+/-)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin -3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-[(3,5-Bis-trifluoromethyl)-phenyl]-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

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- (+/-)-*trans*-2-[(3,5-Bis-trifluoromethyl)-phenyl]-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-5-methyl-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-5-methyl-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-5-nitro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-5-nitro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dihydroxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-pyridin-3-yl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-pyridin-3-yl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-5-nitrophenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dihydroxy-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-pyridin-3-yl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-nitrophenyl)-4H-chromen-4-one;
- (+/-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-nitrophenyl)-chromen-4-one;
- (+/-)-trans-2-(4-Aminophenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(2-methoxyphenyl)-chromen-4-one;
- (+/-)-trans-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-hydroxy-phenyl)-chromen-4-one;
- (+)-trans-3-Chloro-4-[8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;

- (+)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;
- (+)-trans-2-(4-Bromo-2-chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(4-Bromo-2-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-4-dimethylamino-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-trans-2-(2-Chloro-4-methylamino-phenyl)-5,7-dihydroxy-8-(2-hydroxy methyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-4-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-4-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-trans-2-(2-Chloro-5-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-5-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-trans-8-(2-Azidomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-trans-8-(2-Aminomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-8-(2-Aminomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dihydroxy-chromen-4-one;

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- (+/-)-*trans*-3-{[2-(2-Chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-methyl-pyrrolidin-2-yl}-acetonitrile;
- (+/-)-*trans*-{3-[2-(2-Chloro-phenyl)-5,7-dihydroxy-4-oxo-4H-chromen-8-yl]-1-methyl-pyrrolidin-2-yl}-acetonitrile;
- (+/-)-*trans*-2-[2-Chloro-phenyl-8-(2-mercaptomethyl-1-methyl-pyrrolidin-3-yl)]-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-mercaptomethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-trans- Acetic acid 3-[2-(2-chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-(4-methoxy-phenyl)-pyrrolidin-2-ylmethyl ester;
- (+/-)-*trans*-2-(2-Chloro-phenyl)-8-[2-hydroxymethyl-1-(4-methoxy-phenyl)-pyrrolidin-3-yl]-5,7-dimethoxy-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-[2-hydroxymethyl-1-(4-methoxy-phenyl)-pyrrolidin-3-yl]-chromen-4-one;
- (+/-)-*trans*-Acetic acid-3-[2-(2-chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-propyl-pyrrolidin-2-ylmethyl ester;
- (+/-)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-propyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+/-)-trans-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-propyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;
- (+/-)-*trans*-3-Bromo-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;
- (+/-)-*trans*-2-(2-Chloro-4-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

- (+/-)-*trans*-2-(4-Amino-2-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Bromo-4-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(4-Amino-2-bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-4-Chloro-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;
- (+/-)-*trans*-4-Bromo-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;
- (+/-)-*trans*-4-Bromo-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;
- (+/-)-*trans*-4-Chloro-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;
- (+/-)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;
- (+/-)-*trans*-3-Bromo-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide; or
- (+/-)-*trans*-2-(2,4-Difluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Chloro-3-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-3-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-3-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Bromo-3-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-5-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

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- (+)-*trans*-2-(2-Bromo-5-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Chloro-5-iodo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Chloro-5-iodo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-5-chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Bromo-5-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-1-oxy-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-4-nitro-phenyl)-8-(2-hydroxymethyl-1-methylpyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans* 2-(2-Bromo-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(4-Amino-2-bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-trans-2-(4-Amino-2-bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans-2-(2-Bromo-4-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;
- (+)-*trans*-2-(2-Bromo-4-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-*trans*-2-(2-Bromo-4-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;
- (+)-trans -Acetic acid 8-(2-acetoxymethyl-1-methyl-pyrrolidin-3-yl)-5-hydroxy-2-(4-nitrophenyl)-4-oxo-4H-chromen-7-yl ester;
- (+)-trans-2-(2,4-Dichloro-5-fluoro-phenyl)-8-(2-hydroxymethyl-1- methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one; or

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(+)-*trans*-2-(2,4-Dichloro-5-fluoro-phenyl-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one.

Claim 12 (currently amended)

12. A pharmaceutical composition for the treatment of a disease or disorder mediated by inhibition of cyclin dependent kinase, comprising a therapeutically effective amount of a compound of general formula (Ic) or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof as claimed in claim 1, and a pharmaceutically acceptable carrier.

Claim 13-19 (cancelled)

Claim 20 (currently amended - withdrawn)

20. A process for the preparation of a compound of general formula (Ic), as claimed in claim 1, or a pharmaceutically acceptable salt thereof:

$$R_4$$
 R_5
 R_5
 R_6
 R_6

wherein

R₁, R₂, R₃, R₄, R₅, R₆ and A are as defined <u>in claim 1</u>, which process comprises reacting a compound of formula (XA):

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$$R_4$$
 R_5
 R_5
 R_6
 R_6
 R_6

or a compound of formula (XIIA):

$$R_4$$
 R_5
 O
 O
 R_2
 O
 R_2
 R_5
 R_6
 R_6
 R_6

wherein in each case R₁, R₂, R₃, R₄, R₅, R₆ and A are as defined <u>in claim 1</u>, with an organic or inorganic base, subsequently adding an acid to the reaction mixture capable of effecting cyclization, then adding an organic or inorganic base, and, <u>optionally if appropriate</u>, converting the compound of formula (Ic) into a pharmaceutically acceptable salt.

Claim 21 (currently amended - withdrawn)

21. A process according to claim 20, wherein the compound of formula (XIIA) is obtained by reacting a compound of formula (XIA)

$$R_4$$
 R_5
 R_6
 R_6
XIA

wherein R₂, R₃, R₄, R₅, R₆ and A are as defined <u>in claim 20</u> above, with a carboxylic acid ester, an acid halide, or an activated ester in the presence of an organic or inorganic base in organic or inorganic solvent.

Claim 22 (currently amended - withdrawn)

22. A process for the preparation of a compound of formula (XIIIA) or a pharmaceutically acceptable salt thereof:

wherein R_1 , R_2 , R_3 , R_4 , R_5 and R_{13} are as defined in claim 1, comprising reacting a compound of formula (VIIA)

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wherein R₁, R₂, R₃, R₄, R₅ and R₁₃ are as defined in claim 1, with a reagent suitable to effect replacement of the –OH group on the piperidino ring by a leaving group, in the presence of an organic or inorganic base, followed by adding a suitable organic base in the presence of a suitable organic solvent to effect contraction of the piperidino ring, and, optionally if appropriate, converting the resultant compound of formula (XIII) into a pharmaceutically acceptable salt.

Claim 23 (cancelled).

Claim 24 (previously presented)

24. The compound of claim 4, wherein R_{11} is hydrogen.

Claim 25 (cancelled)

Claim 26 (cancelled)

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